STATE OF NEW YORK DEPARTMENT OF HEALTH



PUBLIC WATER SYSTEM SUPERVISION (PWSS) PROGRAM

Mid-Year Report

Federal Fiscal Year 2014

Covering the period October 1, 2013 through March 31, 2014

July 2014



GOAL 1: TO ASSURE THAT WATER SUPPLIERS ARE IN COMPLIANCE WITH THE STATE SANITARY CODE AND THAT AN ADEQUATE QUANTITY OF POTABLE, AESTHETICALLY PLEASING DRINKING WATER IS DELIVERED BY PUBLIC WATER SUPPLIES.

1. Assure compliance with Part 5 of the SSC by:

A. Initiating timely and appropriate action against all significant non-compliers (SNCs), by bringing SNCs into compliance or negotiating a voluntary signed compliance schedule or initiating formal legal proceedings within six months of discovery, including reviewing quarterly Enforcement Targeting Tool (ETT) reports as provided by the U.S. Environmental Protection Agency (USEPA), and reporting on the status of unresolved SNCs to USEPA on a quarterly basis.

STATUS: The New York State Department of Health (NYSDOH), Bureau of Water Supply Protection (BWSP) submitted quarterly SNC status reports to USEPA as required. The following is a summary of compliance activities during October 1, 2013 to March 31, 2014 (reporting period):

Systems returned to Compliance – 56 Enforcement Action Taken – 93

B. Immediately responding to all acute violations (nitrate, E. coli, etc.), including assuring that appropriate corrective actions are taken, appropriate public advisories are issued within 24 hours, and problem alerts are issued as needed.

STATUS: Immediate response was made for all acute violations. During the reporting period 32 problem alerts were prepared and issued by Field and BWSP staff. Three (3) of the problem alerts were for a microbiological event involving E. coli. Twenty-one of the 32 problem alerts were for failed infrastructure/equipment with the vast majority being water main/pipe breaks.

C. Investigating all reports of possible waterborne disease outbreaks and reporting identified outbreaks to the Centers for Disease Control and Prevention (CDC).

STATUS: The BWSP is prepared to investigate all possible waterborne disease outbreaks, report identified outbreaks, and review engineering studies that are proposed to address and mitigate any outbreak. With the support of a CDC grant, the National Waterborne Outbreak Reporting (NORS) mechanism is fully operational and it is currently used by Staff to report to CDC the identified waterborne diseases outbreaks.

D. Conducting annual reviews and sanitary surveys at all public water systems granted a waiver from disinfection.

STATUS: During the reporting period, there were approximately 640 sanitary surveys and/or site visits conducted at public water systems (PWSs) that maintain a valid waiver from disinfection. There are currently 1,430 PWSs with a disinfection waiver.

E. Reviewing operation reports submitted by public water suppliers, identifying violations and other problems that require follow-up.

STATUS: During the reporting period nearly 33,000 operation reports were received and reviewed by BWSP and local health department (LHD) staff with appropriate follow up actions taken where required. BWSP and LHD staff also reviewed 625 operation reports on the use of fluoride by public water systems across the State. This information was shared with the Department's Bureau of Dental Health for review and entry into the federal Water Fluoridation Reporting System (WFRS). Data in WFRS can be viewed by the public, dental professionals, and public health staff to assist in determining the level of fluoride prophylaxis necessary.

F. Assuring Annual Water Quality Reports (AWQR) are issued when required.

STATUS: As of March 31, 2014, a total of 446 AWQRs, for calendar year 2013, were received. AWQRs are due by May 31st of each year.

Seventeen (17) Notices of Violation (NOV's) were issued for 2012 AWQR reports that were overdue.

- 2. Coordinate with Wadsworth Center for Laboratories and Research (WCLR) to assure that State Laboratory capabilities are maintained by:
 - A. Maintaining EPA certification of the State Laboratory for all analyses required under the Safe Drinking Water Act (SDWA), including participation in water supply proficiency testing (WSPT) studies conducted by approved providers.

STATUS: The laboratories have current National Environmental Laboratory Approval Program (NELAP) accreditation for the environmental analyses of drinking water.

B. Maintaining implementation of the lab certification program for laboratories performing drinking water analyses, per primacy requirements.

STATUS: The NYSDOH continues to maintain implementation of the Environmental Laboratory Approval Program (ELAP). To become certified, a laboratory must be directed by an individual who is qualified through education and experience and perform satisfactorily in at least semi-annual proficiency testing and a biennial on-site inspection. More detailed information on this program is available at: http://www.wadsworth.org/labcert/elap/elap.html

C. Maintaining and updating, as necessary, a Quality Assurance Management Plan (QAMP).

STATUS: The BWSP continues to implement the USEPA endorsed QAMP, which covers the five-year period from FFY2013-FFY2018.

D. Conducting special surveillance sampling for bacteriological parameters, as well as inorganic and organic chemicals at public water systems.

STATUS: Surveillance sampling for bacteriological, organic, inorganic and radiological parameters continued as scheduled. Approximately 4,265 bacteriological, 806 inorganic, 172 organic and 9 radiological samples were analyzed in the reporting period.

		Completed
	Planned for FFY14	as of March 31 2014
Bacteriological	9,600	4,265
Inorganic Chemicals	2,000	806
Organic Chemicals	700	172
Radiologicals	50	9

3. Provide technical assistance to public water systems in achieving compliance by:

A. Responding to requests and inquiries regarding technical assistance, rule interpretation, or guidance, including responding to consumer complaints.

STATUS: NYSDOH and LHD staff provided technical assistance and/or guidance to numerous regulated public water systems; all consumer complaints were addressed.

B. Determining compliance with existing regulations and promoting improved operation of public water systems by conducting periodic sanitary surveys.

STATUS: As of March 31, 2014 the following sanitary survey were completed:

Type of	# of Surveys
Public Water System	
Community**	873
Non Transient Non Community	247
Transient Non Community	1050

^{**}Includes the following types of Community Water Systems: Municipal, Purchase, Surface w/ treatment, Avoidance, Groundwater

C. Providing technical project assistance (e.g., fluoridation, DWSRF) to public water systems.

STATUS: Field and BWSP staff provided direct technical assistance to public water systems on design and operational problems, as requested/needed. During this reporting period, four (4) systems received on-site fluoridation assessments. Two full day drinking water fluoridation trainings sessions were held in the Capital Area (Lake George) and Central (Watertown) regions during this reporting period.

D. Directing provision of small system technical assistance through third party contract.

STATUS: BWSP staff continued to direct the small systems Technical Assistance (TA) contractor. During the reporting period, there were 119 site visits performed and six days of training conducted by the TA contractor.

4. Assure public health protection at public water systems using surface water sources by:

A. Assuring unfiltered community and non-community surface water supplies follow established avoidance determinations, compliance schedules, exemption approvals, or stipulations to meet filtration mandates, including annual sanitary surveys.

STATUS: As of March 31, 2014, seven (7) Community Water Systems remain out of compliance with the Surface Water Treatment Rule (SWTR). Compliance schedules exist for five (5) of the seven (7) Community Water Systems.

There are no Non-Community Water Systems out of compliance with the Surface Water Treatment Rule (SWTR). The last system, Antlers of Raquette Lake, terminated service with the remaining homeowners going to groundwater wells.

Seventeen (17) Ground Water Under the Direct Influence (GWUDI) of Surface Water systems remain out of compliance with the SWTR. Compliance schedules exist for five (5) of these systems. Two systems returned to compliance and one system was inactivated.

B. Completing Comprehensive Evaluations (CPEs) at 2 to 3 existing community water treatment plants each year.

STATUS: During this reporting period, the BWSP made significant advances in reestablishing the CPE program. Internal staffing realignments were made to support the program. Field equipment has been evaluated and quotes for upgrades and repairs have been received. Staff training and health & safety requirement have been reviewed and candidate water systems, for having a CPE conducted, are being evaluated. The month of September is being targeted for conducting a CPE.

C. Conducting 2 to 3 follow-up visits at communities that had a full CPE to determine the degree of implementation of the recommendations, to discuss any new difficulties at these facilities, or to support communities who are having a specific critical problem.

STATUS: No CPEs were conducted during this reporting period. Follow-up water system visits will be scheduled after the next CPE.

- 5. Assure public health protection by developing, adopting and implementing mandatory federal drinking water regulations into State Sanitary Code, including development and submittal of primacy packages, for:
 - A. Groundwater Rule

STATUS: Primacy for the Groundwater Rule was obtained on February 28, 2013.

B. Variance and Exemption Rule

STATUS: Regulatory process for adoption of remaining provisions of the Variance and Exemption Rule is ongoing. Draft changes to the State Sanitary Code are undergoing internal review.

C. Lead and Copper Rule Minor/Short-Term Revisions

STATUS: Regulatory process for adoption of the Lead and Copper Rule Minor/Short-Term revisions is ongoing. Draft changes to the State Sanitary Code are undergoing internal review.

D. Long Term 2 SWTR and Stage 2 Disinfectants and Disinfection By-Products Rule (LT2/Stage 2)

STATUS: Regulatory process for adoption of LT2/Stage2 is ongoing. Draft changes to the State Sanitary Code are undergoing internal review. Successful collaborative efforts between NYSDOH and USEPA, Region 2 on implementation of the LT2/Stage2 continue.

E. Cross-Media Electronic Reporting Rule (CROMERR) will be adopted and implemented for eDWR under the limited set of requirements applicable to states that do not incorporate electronic signature requirements in their primacy package.

STATUS: The planned deployment of Electronic Drinking Water Reporting (eDWR) has been put on hold. This will be considered for implementation in conjunction with the release and implementation of SDWIS Prime.

F. Other Federal Regulations will be adopted into the State Sanitary Code and primacy packages will be submitted in an expeditious manner as these rules are federally promulgated.

STATUS: It is anticipated that NYSDOH will be submitting an extension request for primacy of the Revised Total Coliform Rule (RTCR), before the February 13, 2015 deadline.

G. Assist the U.S. EPA in the Implementation of the Unregulated Contaminant Monitoring Rule and developing alternative strategies for regulating contaminants.

STATUS: BWSP staff continue to assist USEPA Region 2 with implementing the Unregulated Contaminant Monitoring Rule by serving as the liaison between EPA and the public water systems, addressing inventory and sampling schedule questions for large systems, and by providing technical assistance to the small public water systems for sampling protocols.

GOAL 2: ASSURE THAT LOCAL HEALTH DEPARTMENTS ARE FOLLOWING DEPARTMENT OF HEALTH POLICY FOR REGULATING PUBLIC WATER SUPPLIES.

- 1. Insure that local health department water supply programs properly implement the program by:
 - A. Continuing to use SDWIS-State as reporting and management tool, including the training of regional staff and LHDs on SDWIS-web.

STATUS: Total system usage during the reporting period was approximately 110,060 sessions. This is slightly greater than the usage reported for the same period last year. The increased use is credited to the efforts of regional field staff in promoting the new environmental health assessment protocol and performing reviews of the efficacy of LHDs based on the recommendations of the environmental health assessment tool.

The number of staff with rights to use SDWIS application is similar to that reported in the previous year. Presently, 855 users have rights to SDWIS including system administration, data entry or inventory access. This does not account for the usage by those viewing SDWIS data through Drinking Water Watch (DWW).

B. Continuing the development of usable management reports from SDWIS-State (i.e., compliance reports, etc.), and SDWIS Add-Ons.

STATUS: SDWIS quality checks support the promulgation of new rules and enhance the tracking efforts pertaining to existing rules. The number of total daily quality check categories remains at 107. The BWSP created the Enhanced Quality Report – that is, a highly detailed description of each error / quality category for use by the field. Each enhanced quality check provides the name of the quality check, describes what is checked, provides step-by-step instructions on correcting errors, and provides a description on how the error is created. Field coordinators have been provided with a spreadsheet containing all 107 enhanced quality checks to assist field staff with improving SDWIS data quality.

C. Developing and implementing electronic water quality data exchange (electronic Drinking Water Reporting, eDWR), including becoming CROMERR compliant if applicable, for the direct reporting of laboratory data into the SDWIS database.

STATUS: *Electronic Drinking Water Reporting will be explored with the release and implementation of SDWIS Prime.*

D. Developing and submitting annual compliance report by July 1.

STATUS: NYSDOH prepares a report of public water systems that had violations during the previous year to satisfy the requirements of Section 1414(c)(3) of the 1996 Amendments to the SDWA. New York submits data including public water supply inventory statistics, violations, and enforcement actions issued to violators to SDWIS/Fed on a quarterly basis. Tables in the report are based on data retrieved from NYSDOH databases maintained by each of the LHDs and district offices. Note: The 2013 annual compliance report is due by July 1, 2014 and will be posted to the Department's website.

E. Conducting annual targeted audits of all LHDs.

STATUS: Field coordinators perform quarterly site visits to each county health department and/ or NYSDOH District Office located within their assigned area. Field coordinators provided written reports of findings and recommendations to LHDs in a timely manner.

F. Continuing implementation of Drinking Water Enhancement (DWE) grants, including approving annual water work plans.

STATUS: The New York State 2013/2014 budget contained local assistance appropriations for the water supply protection program (i.e. DWE) program. Review and approval of 37 drinking water work plans through the DWE grant program ensures implementation of a full drinking water program at the local level.

G. Continuing to provide training to LHDs for properly conducting sanitary surveys at public water systems with groundwater and/or surface water sources.

STATUS: Sanitary Survey training was presented to LHD staff by the Cadmus Group under contract with NYSDOH. A total of three (3) sessions were provided and consisted of two sessions on Sanitary Surveys at groundwater systems and one session on Sanitary Surveys at surface water systems. The groundwater courses were held October 8-9 in Rensselaer County and October 21-22 in Suffolk County. The surface water course was held October 23-24 in Dutchess County.

H. Implementing recommendations made during the data verification audit.

STATUS: The BWSP continued to implement the recommendations resulting from the 2008 Data Verification Audit.

During this reporting period, USEPA conducted a program review at the Oneida County Health Department to verify the reliability of data reported in SDWIS

GOAL 3: ASSURE THAT WATER SUPPLIERS ARE ADEQUATELY PROTECTING THEIR SUPPLIES, ARE PLANNING FOR FUTURE NEEDS AND CONSTRUCTING FACILITIES TO ADEQUATELY COLLECT, STORE, TREAT AND DISTRIBUTE POTABLE AND AESTHETICALLY PLEASING WATER.

- 1. Assure that water supply facilities are built in accordance with proper design criteria by providing conceptual review and design approval of new construction and major modifications to water supply systems, including:
 - A. Engineering plans/reports and specifications, inclusive of pilot studies and corrosion control plans.

STATUS: BWSP reviewed 50 projects related to drinking water infrastructure and issued 21 approvals of plans and 16 completed works approvals for prior approved projects. Field office staff and local county health department staff also continued to review and approve plans and issue approval of completed works for drinking water infrastructure projects. BWSP provided guidance to field staff with respect to plan review standards. As an incentive to assist systems in protecting their supplies and planning for future needs, the DOH provides funding through the drinking water state revolving fund (DWSRF) and during this reporting period successfully financed 11 projects totaling \$59 million including \$5 million in grants for disadvantaged communities. With respect to planning for future needs, the DOH requires that for all DWSRF financed projects, if interconnection capability exists it must be the project selected unless from a capacity development viewpoint is demonstrated that it is disadvantageous to do so. In addition, all DWSRF projects require plans and specifications to be approved and also require a smart growth analysis in accordance with State law.

B. New processes

STATUS: No new processes were reviewed during the reporting period.

C. Cross connection control plans

STATUS: The central office, field office staff and local county health department staff continued to review and approve cross control connection control plans that were submitted by public water suppliers. In addition, the central office continues to monitor to ensure quality control, the approximately 29 public water systems that have been delegated the approval authority for cross connection control plans for their systems.

D. Emergency Plans

STATUS: The New York State Public Health Law requires all community water systems in New York that serve populations greater than 3,300 to update contact information in Vulnerability Assessments (VAs) and Emergency Response Plans (ERPs) annually and provide a full resubmission of their VAs and ERPs to the State every 5 years. There are 320 community water systems serving greater than 3,300 people that are required to submit VAs/ERPs. In 2013, 145 water systems were required to submit VA/ERP documents. In 2014, 84 water systems are required to submit VA/ERPs. During the current reporting period, 44 VA/ERPs were granted full approval, 18 were conditionally approved and 33 were received for review.

E. On-Site Waste Treatment Systems (OWTS) plans, policy, and design

STATUS: During the reporting period, one commercial product was reviewed for its compliance with the graveless absorption system requirements specified in 10 NYCRR 75-A Residential Onsite Wastewater Treatment Standards.

2. Continue to assess whether community groundwater systems may be under the influence of surface water. During each reporting year, make significant progress toward completion of assessments and/or compliance (approximately 50 Community Wells/year).

STATUS: Efforts continue on GWUDI assessments for community groundwater systems. Of the wells currently active, 11, 244 have had "negative" determinations, 392 have had "positive" determinations and 1,154 have not had determinations made yet.

3. Continue to implement the State's Capacity Development Program including submitting the Annual Capacity Development Report to the U.S. EPA by December 31st of each year, and submitting the triennial Report to the Governor by September 30, 2011.

STATUS: Implementation of the State's Capacity Development Program based on the Capacity Development Strategy approved by the U.S. EPA on September 29, 2000 is ongoing. The Annual Capacity Development Report for FFY 2013 was submitted to EPA by December 31, 2013. DOH is preparing the triennial assessment report on the Department's capacity development efforts and the report will be submitted to the Governor by September 30, 2014 as required. In July 2012, NYSDOH received a request from New York Rural Water Association (NYRWA) to provide at least three 6-hour "Check Up Program for Small Systems" (CUPSS) training sessions for operators and circuit riders. In 2013, NYSDOH partnered with NYRWA to provide two training sessions.

- 4. Continue to implement the Source Water Assessment and Protection Programs by:
 - A. Reviewing and updating, as appropriate, approximately 50 new/existing source water assessments annually.

STATUS: Source water assessments are updated through SDWIS as part of sanitary surveys that include a source water evaluation. Procedures are in place to ensure that an initial source water assessment is prepared at water systems that are developing new sources.

B. Updating or preparing a Source Water Assessment Plan summary report where needed.

STATUS: No Source Water Assessment Plan summary reports were requested during the reporting period. Requests for drinking water and source water assessment information were filled. Requests for information about public water sources and assessment areas near proposed new and expanded natural gas pipeline routes were received during the reporting period. Federal regulations require companies to get information about drinking water sources and assessment areas near pipeline routes.

C. Continuing to provide support to local health departments and communities in developing a source protection/well head protection program that incorporates the source water assessment.

STATUS: BWSP continues to provide guidance on using source water assessment reports and conducting source water protection activities including well head protection as needed/requested.

D. Ensuring that public water systems that draw water from the Hudson River are properly monitored and protected during and after the Hudson River PCB dredging project.

STATUS: Hudson River dredging continued until November 6, 2013 and more than 20 samples were collected from water systems during this reporting period. A focus was placed on the Green Island and Bethlehem water supplies due to the proximity of dredging to these systems in late October and early November. In addition to collecting samples for analysis, technical staff met with elected officials and public works officials for the Town of Bethlehem and the City of Green Island. The sample results show there was no impact to the two water systems.

E. Continue to perform security inspections of public water systems when needed in response to security issues. Perform security assessments, at least once per quarter, for volunteer systems to help improve individual system security and promote an improved security culture.

STATUS: No security inspections were conducted in this reporting period. Field and BWSP staff include review of security components during sanitary surveys and other water system inspections (e.g., completed works inspections).

GOAL 4: ASSURE THAT POTABLE DRINKING WATER IS PROVIDED DURING EMERGENCIES.

1. Assure potable water is provided during water supply emergencies by:

A. Responding to requests for technical assistance in times of emergencies, including coordinating with the State's Office of Emergency Management (OEM) for the release of stockpile equipment (estimate 20 incidents). This includes the preparation and issuance of appropriate problem alerts.

STATUS: The BWSP continues to respond to all requests for technical assistance in times of emergencies. Utilizing grant funds, the BWSP placed an order for four trailer mounted cartridge filtration units with UV disinfection capable of producing 25gpm. In addition, BWSP continues to work with the New York State Office of Emergency Management (NYSOEM) to procure and maintain appropriate equipment for water supply emergencies at the State emergency stockpiles. The BWSP is also coordinating potential involvement of NYWARN member in the upkeep and maintenance of the emergency stockpile water equipment.

B. Preparing a summary report of emergencies during the reporting year and submitting a copy to EPA Region 2.

STATUS: A report is being drafted on public water system emergencies during calendar year 2013.

C. Promoting mutual aid between water utilities, including supporting the NY State Water/wastewater Agency Response Network (NYWARN), providing information to the regulated community about mutual aid and NYWARN, and incorporating NYWARN into appropriate training opportunities state wide.

STATUS: BWSP manages a small contract with the NY Section of the American Water Works Association (NYAWWA) for promoting NYWARN. NYAWWA promotes NYWARN by publishing articles about NYWARN, providing training, and outreaching at water conferences. BWSP participated in several meetings with NYWARN leaders related to expanding NYWARN capabilities. The BWSP is helping to coordinate with NYSOEM and NYWARN a place for active involvement of NYWARN at the NYSEOC during emergency activations.

D. Assuring that certified bulk and/or bottled water is available when necessary.

STATUS: The BWSP maintains up to date contact information for certified bulk haulers and bottled water producers, and provides this information on its public web site at: http://www.health.ny.gov/environmental/water/drinking/bulk_bottle/. The use of these sources during emergencies is covered by BWSP guidelines for community water system emergencies, and is overseen by LHD staff. In addition potable water tankers are kept ready and available by the NYSOEM in coordination with the BWSP. During this reporting period there was no use of these emergency tankers.

GOAL 5: ASSURE THAT EMERGING ISSUES IN WATER SUPPLY REGULATIONS ARE EFFECTIVELY REVIEWED AND INNOVATIONS IN WATER SUPPLY DELIVERY ARE PROMOTED, AS WELL AS INCREASING THE TECHNICAL COMPETENCE AMONG REGULATORY AND OPERATIONAL STAFF.

1. Assure staff are properly trained by holding quarterly Bureau-wide meetings, attendance at the New York Section of the American Water Works Association (NYAWWA) and New York Rural Water Association (NYRWA) training sessions and other specific local, state and national conferences, including (American Water Works Association's National Conference, Association of State Drinking Water Administrators' National, Member, and Work Group Meetings, New England Interstate Water Pollution Control Commission, Association of Board Certification).

STATUS: Meetings and remote conferences were held on a regularly scheduled basis to present or review regulatory issues and help develop and maintain standardization and efficient program delivery. These included weekly BWSP program managers meetings, biweekly conference calls with regional environmental health directors, quarterly BWSP staff meetings, and conference calls with regional water field coordinators. Program initiatives were presented to BWSP staff and to field staff thru these various venues, including, attendance at the October 8, 2013 meeting of the Conference of Environmental Health Directors. Though significantly reduced due to travel restrictions, BWSP and field staff participated in key conferences during this reporting period including the EPA sponsored Capacity Development meeting November 18-21, 2013 in Atlanta, GA, the CDC Water Fluoridation Principles and Practices training February 11-13, 2014, in Sacramento, CA and the Association of State Drinking Water Administrators member meeting March 10-12, 2014 in Washington DC.

2. Assure that water systems are operated by competent operators by:

A. Certifying new operators (50)

STATUS: 135 new operators were certified during this reporting period.

B. Renewing operator certifications (1,000)

STATUS: 794 operator certifications were renewed.

C. Reviewing and endorsing operator certification courses (20)

STATUS: 27 operator certification courses were reviewed and endorsed.

D. Reviewing and approving operator renewal training courses (100)

STATUS: 673 operator renewal training courses were reviewed and approved.

E. Developing and implementing regulatory changes to standardize operator certification training provider approvals

STATUS: The BWSP developed proposed standards for delivery of certification training and most training providers are meeting these proposed standards voluntarily. Regulatory changes to require training providers to meet the proposed standards were initiated in 2007 but are on hold due to other priorities.

- 3. Assure that cross connection control programs at water systems are maintained by competent back flow prevention testers by:
 - A. New certified back flow prevention testers (25)

STATUS: 218 new certified back flow prevention testers.

B. Renewing back flow prevention testers (500)

STATUS: 342 renewals for back flow prevention testers.

4. Conduct basic Environmental Health Course Water Supply 109 module at three locations each year for new state and county staff.

STATUS: The water supply module of the Basic Environmental Health Course for new staff was held on October 2-3, 2013 in Rensselaer, NY.

5. Continue participation in Child Health Initiative by assisting EPA with collection and analysis of lead samples from school drinking water outlets in selected cities around the state.

STATUS: BWSP staff continued to assist USEPA Region 2 in providing technical assistance to identify potential school districts in New York State (Newburgh Expanded School District) for implementing the lead in schools initiative, as well as providing coordination of laboratory services for sample analysis.

6. Actively seek additional funding to conduct relevant research.

STATUS: BWSP staff continued work on two Centers for Disease Control and Prevention (CDC) Environmental Health Specialists Networks grants in this reporting period. One was entitled "Revitalizing Core Environmental Health Programs through the Environmental Health Specialists Network (EHSNet) Research" and the second was a proposal focused on the delivery of environmental health services (i.e. practice). Both awards originally were made in July 2010. Grant renewals for 2013-2014 were submitted in early 2014 (\$175,000 for research and 50% of a \$150,000 practice grant written with our State food partners.); we are currently finishing year four of our second five-year cycle. Competitive re-application for another 5-year period will be pending at the end of 2014 and beginning of the 2015 calendar year.

As part of the CDC agreement, staff has continued to implement the use of computational fluid dynamics for checking disinfection components during design review. In addition, a manuscript has been prepared that is related to an advanced analysis of baffle factors for disinfection vessels.

Under the EHS-Net Water Research grant a pilot study looking at pharmaceuticals and personal care products associated with on-site septic systems around a multi-use lake was completed in September 2013.

Staff were awarded \$171.6K/year for a cooperative agreement entitled "Improving New York State Capacity to Assess Wells and Small Drinking Water System." This initiative related to private well inventory and vulnerability was awarded in September 2013. New full time staff has been hired to perform the database tasks and serve as a liaison among the various agencies/entities involved. We anticipate hiring interns or temporary hourly assistants to help with data input and analysis in the Summer of 2014. Submission for renewal has been completed for the period September 1, 2014 through August 31, 2015.

The five year CDC Cooperative agreement for Harmful Algal Bloom (HAB) ended on September 30, 2013, but the BWSP was granted a three month no cost extension. The BWSP is seeking additional funding to continue and expand this and related work and continues to work closely with DEC and others in ongoing monitoring and outreach efforts.

In May 2014, BWSP was selected to host a 2-year CSTE/CDC Fellow. This individual will focus on hospital syndromic surveillance data as it may relate to gastrointestinal illness as a result of water quality or infrastructure failure.

GOAL 6: EFFECTIVELY ADMINISTER THE PUBLIC WATER SYSTEM SUPERVISION PROGRAM.

1. Ensure all EPA reporting requirements under the grant are met and EPA proposal for regulations and policies are promptly commented upon as requested.

STATUS: Reporting requirements for the FFY 2013 PWSS Grant were fully met, and this report completes the reporting requirements for the first half of FFY 2014. The BWSP provides appropriate input on proposed USEPA regulations and policy matters as they arise.

2. Continue to promote need for adequate resources to implement full water supply regulatory program, including appropriate budget proposals and personnel management.

STATUS: The program has continued its efforts to maintain adequate budget support while participating in the State and Department's budget austerity initiatives. The Drinking Water Enhancement grant program for county health departments continued during state fiscal year 2014 with an allocation of \$5,013,000.

3. Ensure overall program coordination with Federal and State agencies.

STATUS: A new PWSS grant agreement for FFY's 2015 – 2017 will be submitted to USEPA in August 2014. The first portion of the PWSS grant award for FFY 2014 was received by NYSDOH on February 26, 2014. The remaining portion of the FFY 2014 has not yet been received.

4. Submit to EPA a status report or work plan achievements at MID and END of year.

STATUS: The end-of- year status report documenting PWSS grant work plan activities completed during FFY 2013 was submitted to USEPA on December 27, 2013. This mid-year status report documents work plan achievements for the first half of FFY 2014, from October 1, 2013 through March 31, 2014.

NYC Compliance and Watershed Program

1. Continue to track New York City (NYC) avoidance compliance by:

A. Providing daily oversight of the City's compliance with all avoidance deliverables.

STATUS: BWSP staff continued to review and respond accordingly to all Filtration Avoidance Determination (FAD) deliverables. Staff finalized the 2013 Annual On-Site Inspection Report and submitted it to the New York City Department of Environmental Protection (NYCDEP) (with copy to EPA). NYCDEP triggered the Cryptosporidium and Giardia Action Plan (CGAP) on March 19, 2014 when 8 Giardia cysts were detected in a 50 liter sample collected from the effluent of Hillview Reservoir. In accordance with the CGAP, NYCDEP convened conference calls to brief regulators and discuss follow up. Subsequent investigations did not confirm the source of the cysts; however, possible sources were source water, where Giardia levels were seasonally elevated, and raccoon feces, which were discovered on a grated catwalk located over the reservoir. Giardia levels in follow-up samples were below trigger levels, allowing de-escalation to normal operating procedures. In accordance with the FAD, NYCDEP has summarized the event and follow-up activities in an After Action Report, which was submitted to NYSDOH and EPA. NYCDEP will be enhancing control of raccoons and other mammals around Hillview Reservoir as a result of this event.

B. Participating in the City's Agricultural Program by participating on the Watershed Agricultural Council.

STATUS: Staff did not participate on the Watershed Agricultural Council (WAC) during the reporting period. However, BWSP staff reviewed activities of the Watershed Agricultural Program as reported in the NYCDEP's annual FAD report.

C. Work jointly with USEPA to assure the Hillview Reservoir covering project is in accordance with Administrative Orders.

STATUS: The BWSP reviewed monthly reports on NYCDEP's activities to monitor and deter wildlife in and around Hillview Reservoir. These wildlife management reports are requirements of the Hillview Reservoir Administrative Order. The next milestone date for the Hillview Reservoir Administrative Order is January 31, 2017.

D. Provide oversight and liaison with all "Parties" to ensure implementation of the New York City Memorandum of Agreement (NYC MOA), including participation in the various MOA Committees.

STATUS: The BWSP continued to participate in various committees including: the Wastewater Watershed Enforcement Coordination Committee; the Stormwater Watershed Enforcement Coordination Committee; and the Recreational Boating task force. Staff participated in meetings involving USEPA, NYSDEC, New York State Department of State, NYCDEP, the Coalition of Watershed Towns, the Catskill Watershed Corporation, and watershed county representatives to help develop a NYC Watershed Local Flood Hazard Mitigation Program after the flooding and devastation brought on by Hurricane Irene and Tropical Storm Lee in 2011.

E. With issuance of the final Catskill/Delaware Filtration Avoidance Determination (FAD) (July 2007), NYSDOH, having been delegated primacy, will work collaboratively with Region 2 in the oversight of the FAD.

STATUS: Since the transfer of primacy for oversight of the FAD under the Surface Water Treatment Rule, NYSDOH has continued to collaborate with USEPA on the oversight of the FAD. During the reporting period, NYSDOH, in consultation with USEPA, conducted activities related to revising the 2007 FAD to develop program requirements for the Second Five-Year Period of the FAD. NYSDOH coordinated with USEPA in commenting on FAD deliverables

F. Ensure that the Croton Water Treatment Plant (filtration) remains on schedule.

STATUS: Construction of the Croton water filtration plant (WFP) has been delayed due to a number of circumstances, as described in NYCDEP's monthly progress report for the Croton Consent Decree. NYSDOH has participated with USEPA and NYCDEP in revising milestones for completion of the plant, which accommodate these delays and provide adequate time for WFP testing, start up and operation. NYSDOH reviews progress of the construction of the Croton WFP through monthly reports submitted by NYCDEP and periodic visits to the construction site. NYSDOH continued to participate in Croton Regulators' meetings and to work with NYCDEP by reviewing start up procedures. During the reporting period, NYSDOH issued interim completed works approval for both Plant A and Plant B of the treatment plant.

G. Ensure that the Cat/Del Ultraviolet (UV) light disinfection facility remains on schedule.

STATUS: In accordance with the Cat/Del UV Administrative Order on Consent, the CDUV facility came fully on-line by December 1, 2012 treating Catskill/Delaware water with a UV dose of 40 mJ/cm². NYSDOH has accepted the validation report for the UV units installed in the treatment facility with the condition that NYCDEP continue to provide a UV dose of 40 mJ/cm² until they confirm that operating parameters defined by the validation report have been programmed into the operating system for the facility. NYCDEP continues to submit monthly progress reports and has submitted an application to NYSDOH for completed works approval.

H. Assure that the adoption of amendments to the New York City Watershed Rules and Regulations by the State occurs in a timely manner.

STATUS: Amendments to the New York City Watershed Rules and Regulations were formally adopted into the Rules of the City of New York and became effective in the watershed on April 4, 2010. The documents required by the State Administrative Procedures Act (SAPA) in order to adopt these Watershed Regulations into NYS code have been submitted to the State Regulatory Affairs unit and are currently under review by the NYSDOH Division of Legal Affairs staff.

I. Oversee development of and finalize the mid-term revisions to New York City's 2007 Filtration Avoidance Determination (FAD).

STATUS: Staff finalized the mid-term revisions to NYC's 2007 FAD and issued the Revised FAD on May 7, 2014. Program requirements for the Second Five-Year Period of the FAD reflect NYCDEP's 2011 Long-Term Watershed Protection Plan and the results of discussions among NYSDOH, USEPA, NYSDEC and NYCDEP, with input from Watershed stakeholders.